Safe drinking water Act N.J.A.C title 7 chapter 10

Public Water System

A public water system is an entity which provides water to the public for human consumption through pipes or other constructed conveyances. Any system with at least 5 service connections or that regularly serves an average of at least 25 people daily for at least 60 days out of the year is considered a public water system. Public water systems are categorized as one of the following types of systems: community and non-community (including non-transient non-community and transient non-community)

Non-Transient Non-Community Water System (NTNCWS): A Non-Transient, non-community public water system is defined as a system that regularly (4 hours a day, 4 days a week) serves at least 25 of the same persons on a non-residential basis for at least 6 months per year but not year-round. Some examples are schools, factories, office buildings, and hospitals which have their own water systems. (N.J.A.C 7:10)

Transient Non-Community Water System (TNCWS): A Transient, non-community public water system is defined as a system that serves at least 25 persons daily (different people) on a nonresidential basis for at least 60 days per year. Examples Rest stops, parks, convenience stores and restaurants with their own water supplies, gas station or campground where people do not remain for long periods of time.

Monitoring requirements for Non Transient, non community public water systems The following requirements apply to ground water systems only.

Monitoring requirements for systems that utilize a surface water source may vary from what is indicated below (N.J.A.C. 7:10-5 and 40 CFR Part 141)

1. Total coliform bacteria: One sample is required each calendar quarter. However, if the population served by the system is greater than 1,000, then the Public Community Water Systems requirements apply:

Population Number of Required Samples

1,001 to 2,500 2 samples per Month 2,501 to 3,300 3 samples per Month, etc.

If the routine sample is positive for total coliform, then the certified laboratory will analyze that positive culture medium to determine if fecal coliforms or E. Coli are present. Regardless of the fecal coliforms or E.Coli result, repeat samples must be collected within 24 hours of being notified of the positive total coliform result from the routine sample. A system which collects more than one (1) routine sample/month must collect no fewer than three (3) repeat samples for each positive total coliform sample found. A system which collects one (1) routine sample/month or fewer must collect no fewer than four (4) repeat samples for each positive total coliform sample found. In addition, for systems collecting fewer than five (5) routine samples/month, at least five (5) routine samples must be collected during the next month the system provides water to the public.

All repeat samples must be collected on the same day and they must be 100 ml samples. If all repeat samples are negative for total coliforms (routine sample may have been either positive or negative for Fecal Coliform or E. Coli.), then no further repeat sampling may be required, dependant upon the NJDEP – Bureau of Water Supply and Geosciences determination. The next month the system provides water to the public, at least five (5) routine samples must be taken as specified above. If one (1) or more repeat samples in the set is total coliform positive then the laboratory must again analyze for the presence of fecal coliforms or E.Coli. That result will determine what type of Maximum Contaminant Level (MCL) violation has occurred and the required follow up measures.

2. Nitrates/nitrites: One (1) initial sample for Nitrates and Nitrites from each water source during the first year of operation. Thereafter, one (1) Nitrate sample per year. Future Nitrite sample to be determined.

If the sample result is greater than 50% of the MCL, then one (1) sample per calendar quarter is required until further notice. Quarterly sampling is triggered and must continue uninterrupted until the results of the last four (4) quarterly samples are reliably and consistently below the MCL – which is defined as no sample greater than 85% of the MCL.

3. Lead and copper: Two (2) consecutive six-month monitoring periods starting in the first six months of operation.

For systems serving fewer than 3,301 people:

➤ One (1) first draw sample after a 6 to 8 hour standing time from each sample site required by population as follows:

Population	Sample Sites Required
Less than 100	5
101 to 500	10
501 to 3,300	20

- ➤ If Action Levels for Lead and Copper are met in 90% of samples in two (2) consecutive rounds of sampling, then sampling requirements are reduced to one (1) round of 50% of sample sites per year (a minimum of five (5) per year). After three (3) years of reduced monitoring, one round of sampling every three (3) years.
- ➤ If Action Levels for Lead and Copper are not met in 90% of samples, then further monitoring, corrective action and lead public education is required.
- **4. Nonorganic compounds:** One (1) sample every three (3) years from each water source. Nontransient non-community water systems are required to do this sampling in the third year of each compliance period.
- **5. Asbestos:** No sampling required if a waiver is obtained. An asbestos waiver questionnaire, which indicates the water system is not vulnerable to asbestos, must be submitted to the State. If a waiver is not granted, at least one (1) sample is required.

- **6. Volatile organic compounds:** If no sampling has been preformed to date (i.e. new water system):
 - ➤ Four (4) consecutive quarterly samples must be taken within the first Standard Monitoring Period (SMP) of operation. SMPs are defined as follows: 2002-2004, 2005-2007, 2008-2010, 2011-2013, etc.
 - Yearly samples are required for the first 2 years of the following SMP.
 - Thereafter, one (1) yearly sample must be taken in the third year of each subsequent SMP (2004, 2007, 2010, etc.)

If a regulated VOC is detected at any time (i.e. greater than 0.5 ug/l):

- Quarterly sampling is required until further notice
- ➤ Quarterly sampling must continue uninterrupted until the results of at least four (4) quarterly samples are reliably and consistently below the MCL which is defined as the average of the 4 results no greater than 70% of the MCL, and no sample is at or above the MCL.

If the water system is operating under a VOC waiver, continue to follow directions contained within the waiver.

- **6. Pesticides and synthetic organic compounds:** No sampling is required if a waiver is obtained. A waiver application, substantiated by a vulnerability assessment, must be submitted to the State. Most systems will be eligible for this waiver.
- **7. Radiological:** Not required at this time for non-transient systems.